

What are the Implications?

Consequences for oil-producers???

Consequences for oil-consumers???

May 28—WASHINGTON:
New offshore drilling limited: Obama orders rigs to stop work on about 30 exploratory wells.

2:11 pm June 22, 2010
Federal Judge overrules Obama Gulf moratorium.


June 28 JUNEAU, Alaska
Alaska senator defends BP project in state. Alaska Senator defending BP oil project off Alaska's coast as a state-of-the-art model that should not be halted because of the Gulf of Mexico oil spill.

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Cities Need to Take the Lead in Sustainability

Increased Energy Efficiency / More Renewable Energy Sources

- Lower energy costs helps city budgets.
- Less costly energy is good for business.
- Reduced carbon footprint helps climate / environment.



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Role of States

State can:

- Set big goals
- Provide information and incentives
- Promote economic development
- Promote workforce development
- Provide technical support
- Create partnerships



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What is Alaska Doing?

HB306 and SB220

New legislation signed by Governor Parnell

State Lawmakers set two ambitious goals for Alaska:

- **50%** of electricity from renewable sources by 2025.
- **15% reduction** in per capita electricity use by 2020.



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What is Alaska Doing?

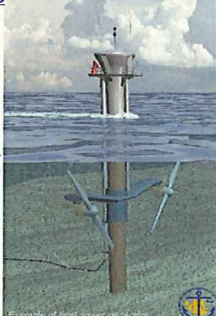
HB306 and SB220

Alaska is an oil and gas producing state **AND** a leader in developing our rich resources for renewable energy .

Also included in the new legislation:

- **Energy Efficiency Retrofits** – \$250M for public building retrofits.
- **Emerging Energy Technology Fund** – grants for technology development.
- **Alternative Energy Tax Credits** – incentives for power producers to work on alternative energy projects.
- **Statewide Energy Policy:** energy efficiency and conservation; renewable energy resource development, including geothermal, wind, solar, hydroelectric, hydrokinetic, tidal, and biomass energy, for use by Alaskans and for export.

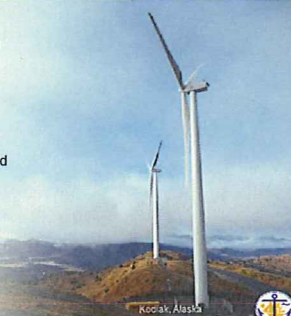
In-state natural gas line remains a priority.



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Examples of Renewable Energy Projects in Alaska


- **Kodiak:** hydroelectric + wind produce >88% of the island's electricity. Since 2009, wind power has saved \$1.6 M in diesel fuel costs.
- **Twenty-two communities** in rural Alaska have wind projects. Wind power replaced 147,000 gallons of diesel in 2009, saving \$441,000.
- **Juneau** electric company plans to deploy a light-duty fleet of electric vehicles, and to encourage wider use of electric vehicles.



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What is Anchorage Doing?


- Building retrofits
- Lighting retrofits
- Energy conservation focus in school buildings
- Efficient building design
- LEED encouraged
- Use of natural daylight in northern building design.



Denaina Center Anchorage, use of natural light

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Energy Efficiency



Mid-town Anchorage

- Of all the energy issues that cities can address, energy efficiency and energy conservation are the easiest and most important.

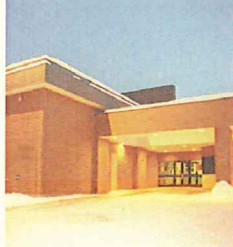
For example:

- In the United States, buildings use 40% of all energy consumed, and produce 38% of all greenhouse gases!
- In the US, 60% of all computers are left on all night!

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What is Anchorage Doing?

Anchorage School District Energy Efficiency Program Successes



BASE Energy Inc. Anchorage school energy audit report


- Pilot Study (8 schools, 2007)**
 - Turning off unused lights.
 - Not leaving outer doors open.
 - Turning off and unplugging electronic equipment.
 - Reducing use of high energy equipment.
- Result:** reduced electric use by 11% and saved \$114,829 with no capital outlay.
- Incentive:** 25% of savings returned to the schools.
- Next phase:** infrastructure audits; retrofits.
- Expanding program to 27 schools this year.

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What is Anchorage Doing?

Alaska Waste Opens Biodiesel Plant

June 19, 2010




BIODIESEL
POWERED BY PROPPELLERS

- Alaska Waste opened a new **250,000 gallon capacity biodiesel plant** at its South Anchorage facility.
- Converted from **used cooking oil** collected on contract from local restaurants.
- Will be used to **fuel the company's truck fleet**, which currently burns 5,000 gallons of diesel fuel per week.

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What else can Cities do?



Cities can:

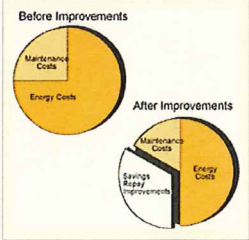
- Communicate vision
- Remove barriers
- Appoint a leader/team
- Align procurement goals
- Do a high profile project
- Leverage existing strengths
- Launch a clean energy fund
- Attract a flagship conference
- Partner with others

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A new way to pay for improvements: Energy Service Performance Contracts (ESPC)

- Allows cities to make major energy-related improvements with little or no money upfront
- The city signs an agreement with a private Energy Services Company (ESCO)
- The ESCO identifies energy saving opportunities and recommends a plan of action
- The ESCO guarantees savings to cover most or all project costs
- The ESCO is paid over a term of 7-10 years through the energy savings resulting from the project
- US government agencies, states and cities are using ESPC's

ESPC: How It Works




Before Improvements

Maintenance Costs
Energy Costs

After Improvements

Maintenance Costs
Savings from Improvements
Energy Costs

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Tumagain Arm of Cook Inlet, overlooking Girdwood Valley

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